

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Previously Presented) A centrifugal fan that sucks in air from a rotary shaft direction and blows air out in a direction that intersects a rotary shaft, comprising:

an electric motor having said rotary shaft;

a main plate having a cooling air hole and being coupled to and rotationally driven by said rotary shaft;

a plurality of blades provided on the surface of said main plate on the side opposite an electric motor and at a position on the outer peripheral side of the radial position of said cooling air hole; and

an air guide that, after a portion of the blown out air has been guided to the vicinity of said electric motor and has cooled said electric motor, guides the air flow so that the revolving direction velocity decreases when blown out from said cooling air hole to the side of said main plate opposite said electric motor.

2. (Previously Presented) A centrifugal fan that sucks in air from a rotary shaft direction and blows air out in a direction that intersects a rotary shaft, comprising:

an electric motor having said rotary shaft;

a main plate having a cooling air hole and being coupled to and rotationally driven by said rotary shaft;

a plurality of blades provided on the surface of said main plate on the side opposite an electric motor and at a position on the outer peripheral side of the radial position of said cooling air hole; and

an air guide that, after a portion of the blown out air has been guided to the vicinity of said electric motor and has cooled said electric motor, guides the air flow so that it is blown out toward the side of the main plate in the counter rotational direction when blown out from said cooling air hole to the side of said main plate opposite said electric motor.

3. (Previously Presented) The centrifugal fan as recited in Claim 1, wherein

said air guide is formed integrated with said main plate.

4. (Previously Presented) The centrifugal fan as recited in Claim 2, further comprising:

a cover that covers said cooling air hole from the side opposite the electric motor, and that is provided so that it rotates integrally with said main plate; wherein,

said air guide is formed between said cover and said main plate.

5. (Previously Presented) The centrifugal fan as recited in Claim 4, wherein

said air guide has a blade shape inclined rearwards in the rotational direction of said cover.

6. (Previously Presented) The centrifugal fan as recited in Claim 5,
wherein

said air guide has a volute blade shape.

7. (Previously Presented) The centrifugal fan as recited in Claim 4
wherein

said air guide is formed in said cover.

8. (Previously Presented) An air conditioner, comprising:
the centrifugal fan as recited in Claim 1;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

9. (Previously Presented) The centrifugal fan as recited in Claim 2,
wherein

said air guide is formed integrated with said main plate.

10. (Previously Presented) An air conditioner, comprising:
the centrifugal fan as recited in Claim 2;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

11. (New) The centrifugal fan as recited in Claim 5 wherein
said air guide is formed in said cover.

12. (New) The centrifugal fan as recited in Claim 6 wherein
said air guide is formed in said cover.

13. (New) An air conditioner, comprising:
the centrifugal fan as recited in Claim 4;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

14. (New) An air conditioner, comprising:
the centrifugal fan as recited in Claim 5;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

15. (New) An air conditioner, comprising:
the centrifugal fan as recited in Claim 6;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

16. (New) An air conditioner, comprising:
the centrifugal fan as recited in Claim 7;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

17. (New) An air conditioner, comprising:

the centrifugal fan as recited in Claim 11;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.

18. (New) An air conditioner, comprising:

the centrifugal fan as recited in Claim 12;
a heat exchanger arranged on the outer peripheral side of said centrifugal fan; and
a casing that houses said centrifugal fan and said heat exchanger.